

What is claimed is

1. A method for searching physiologically active substances comprising;
examining a receptor having an amino acid sequence having two or more sizes for the
5 same receptor by comparing a cDNA sequence of said receptor, wherein the receptor
being a receptor of a cell producing an antagonist to substance in a body or a receptor
of a cell producing an antagonist to said dell *per se*; and examining which region of
the longer receptor are missing in the shorter receptor by comparing the sequences of
the cDNAs.
- 10 2. A method of producing physiologically active peptides, wherein the missing
region determined by the method of claim 1, or its derivatives, are produced.
3. A method of claim 2, wherein the missing region is produced.
- 15 4. A method of claim 3, wherein the missing region is synthesized by chemical
synthesis.
5. A medicine for treating diabetes comprising as an active component a peptide
20 having the effect of increased production of insulin by insulin producing cells, the
peptide having the amino acid sequences indicated by the sequence numbers 1 or 5 of
the sequence table or having amino acid sequences obtained by the substitution inside,
deletion from, insertion into or addition to said sequences of one or several amino
acids.
- 25 6. A medicine for treating diabetes of claim 5 comprising as an active component
a peptide having the amino acid sequence indicated by the sequence number 1 of the
sequence table.

7. A medicine for treating diabetes of claim 5 comprising as an active component a peptide having the amino acid sequence indicated by the sequence number 5 of the sequence table.

5 8. An insulin production regulator comprising as an active component a peptide having the effect of regulated production of insulin by insulin producing cells, the peptide having the amino acid sequence indicated by the sequence number 2 of the sequence table or amino acid sequences obtained by the substitution inside, deletion
10 from, insertion into or addition to said sequence of one or several amino acids.

9. The insulin production regulator of claim 8 comprising as an active component a peptide having the amino acid sequence indicated by the sequence number 2.

15 10. The insulin production regulator of claim 8 or 9, the insulin production regulator being an insulin production inhibitor.

11. The insulin production regulator of claim 8 or 9, the insulin production regulator being a medicine for treating diabetes.

20 12. A gastric acid secretion regulator comprising as an active component a peptide having the effect of regulating the secretion of gastric acid, the peptide having the amino acid sequences indicated by the sequence numbers 3 or 4 of the sequence table or amino acid sequences obtained by the substitution inside, deletion from, insertion
25 into or addition to said sequences of one or several amino acids..

13. The gastric acid secretion regulator of claim 12 comprising as an active component a peptide having the amino acid sequences indicated by the sequence numbers 3 or 4 of the sequence table.

5 14. The gastric acid secretion regulator of claim 12 or 13, the gastric acid secretion regulator being an inhibitor of gastric acid secretion.

10 15. A growth hormone production regulator comprising as an active component a peptide having the effect of regulating the production of growth hormone, the peptide having the amino acid sequences indicated by the sequence number 6 of the sequence table or having amino acid sequences obtained by the substitution inside, deletion from, insertion into or addition to said sequences of one or several amino acids.

15 16. The growth hormone production regulator of claim 15 comprising as an active component, a peptide having the amino acid sequence indicated by the sequence number 6 of the sequence table.

17. The growth hormone production regulator of claim 15 or 16, the growth hormone production regulator being a stimulator of growth hormone production.